

Population is the most commonly used basis for estimating future water use. The development of a comprehensive water system capital improvement plan thus begins with an evaluation of the service area's historical population trends and a projection of its future population. To predict future water demands accurately, it is necessary to determine the appropriate rate, direction, and characteristics of the area's future population changes.

A. CURRENT AND PROJECTED FUTURE POPULATION

Current populations and population projections for the City of Bloomington and Monroe County were obtained from the Bloomington Planning Department, the Monroe County Planning Department, and the U.S. Census Bureau. Data from the 2000 Census indicates that the prior population projections obtained from the City of Bloomington 2002 Growth Policies Plan and the Monroe County Comprehensive Land Use Plan underestimated the actual growth. This underestimation may be the result of the record high student enrollment (37,076) at Indiana University in 2002 and the higher amount of land annexation.

Population forecasts, prepared by the Indiana Business Research Center (IBRC) and published in its 1988 projection series, indicated that Bloomington's population would increase to 64,391 by the year 2010. The 2000 U.S. Census data, however, shows that Bloomington's population (69,291) has already exceeded the IBRC 2010 projection. Likewise, Monroe County was projected to exceed 120,000 people by the year 2010 and the 2000 Census data shows Monroe County to currently have a population of 120,563.

Since the population projections obtained from the Bloomington and Monroe County Planning Departments for 2010 were already exceeded in 2000, revised population growth rates were required. For this Capital Improvement Plan, population estimates for years 2000 through 2030 were determined using current and projected population figures. Three sets of population projections were determined. The first set was based on the assumption that the 1980-1990 growth



(or 1.6% per year) for Bloomington and 10.3% (or 1.0% per rate of 16.5% year) for Monroe County occur in the future. The second set was based on the assumption that the 1990-2000 growth rate of 14.3% (or 1.4% per year) for Bloomington and 10.6% (or 1.0% per year) for Monroe County occur in the future. The final set was based on linear regression of the Census population from 1940 through 2000. The historical and projected populations for the City of Bloomington and Monroe County are shown in Table 2-1.

			Table 2-1		
		Historical an	d Projected Popu	lation	
Year	Year Bloomington Historical Population		Monroe County Historical Population (Including Bloomington)		Monroe
					County
					Historical
	Population	Change	Population	Change	Population
					(Excluding
					Bloomington)
1940	20,870	-	36,534	-	15,664
1950	28,163	7,293	50,080	13,546	21,917
1960	31,357	3,194	59,225	9,145	27,868
1970	43,262	11,905	85,221	25,996	41,959
1980	52,044	8,782	98,785	13,564	46,741
1990	60,633	8,589	108,978	10,193	48,345
2000	69,291	8,658	120,563	11,585	51,272
	Proje	cted Population	s using 1980-1990	Growth Rate ^a	
2005	75,008	5,716	126,783	6,220	51,776
2010	80,724	5,717	133,003	6,220	52,279
2020	94,043	13,319	146,729	13,726	52,686
2030	109,560	15,517	161,871	15,142	52,311
Projected Populations using 1990-2000 Growth Rate ^b					
2005	73,620	4,329	126,970	6,407	53,350
2010	79,185	5,565	133,378	6,408	54,193
2020	90,492	11,307	147,556	14,178	57,064
2030	103,160	12,668	163,241	15,685	60,081



Table 2-1					
Historical and Projected Population					
Year Bloomington Historical Population		Monroe County Historical Population (Including Bloomington)		Monroe County Historical	
	Population	Change	Population	Change	Population (Excluding
					Bloomington)
Projected Populations using Linear Regression ^c					
2005	72,521	3,230	131,092	10,529	58,571
2010	76,644	4,123	138,404	7,312	61,760
2020	84,890	8,246	153,027	14,623	68,137
2030	93,136	8,246	167,650	14,623	74,514

a. Bloomington growth rate of 1.6% per year; Monroe County growth rate of 1.0% per year

Figure 2-1 shows the historical and projected populations based on the 1980-1990 growth rate, the 1990-2000 growth rate, and linear regression for the City of Bloomington and Monroe County.

b. Bloomington growth rate of 1.4% per year; Monroe County growth rate of 1.0% per year

c. Bloomington: Y=8246X+10676, $R^2=0.9883$; Monroe County: Y=14623X+21420, $R^2=0.9845$



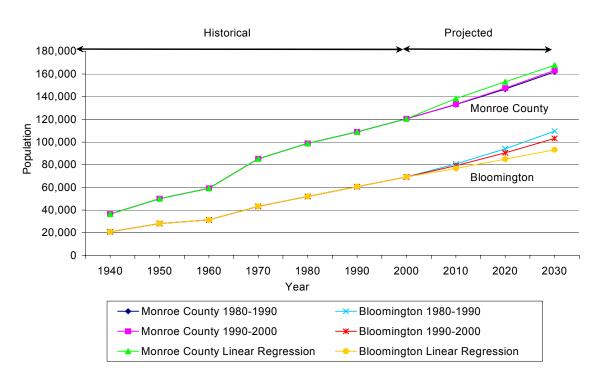


Figure 2-1 Historical and Projected Population

The population projections illustrated in Figure 2-1 indicate little difference between the 1980-1990 and the 1990–2000 growth rates for Bloomington and Monroe County. Although growth is expected to continue steadily for both Bloomington and Monroe County, the County will probably grow at a lower rate than the City assuming annexation and student population continues at an increased rate. The 1980-1990 growth rate produces slightly more conservative results and was used for this study. The population projections utilized for this study are listed in Table 2-2.



Table 2-2 Population Projections				
Year	Bloomington	Monroe County		
2005	75,008	126,783		
2010	80,724	133,003		
2020	94,043	146,729		
2030	109,560	161,871		

B. GEOGRAPHICAL DISTRIBUTION OF POPULATION

The geographical distribution of the population within the CBU service area will continue to change. The City's 2002 Growth Policies Plan presented a land use map, shown on Figure 2-2, that identifies the current service area boundaries and eleven land use types geographically. CBU does not anticipate the current service area boundaries indicated in the land use map to change.

The Growth Policies Plan also identified critical subareas, shown on Figure 2-2, that require additional development recommendations regarding future development. For each critical subarea, the Growth Policies Plan described the intent, overall land use policy, urban service or infrastructure issues, and site design recommendations, i.e., preservation of greenspace or common architectural themes.

Based on the land use plan, the prime growth areas are on the south and west sides of Bloomington. The areas of future development include the State Road 37 corridor, Acuff Road/Kinser Pike, State Road 37/Tapp Road, North College Mall District, Huntington Farms/Moores Pike, East Jackson Creek, Winston-Thomas, Ramsey Farm, Adams Street/Patterson Drive, West 17th Street, Twin Lakes Park North, and the McDoel Switchyard area.

Figure 2-2



Table 2-3 presents the prime growth areas that will affect the geographical distribution of the population and water use.

Table 2-3				
Prime Growth Areas in CBU Service Area				
Area	Land Use Designation			
State Road 37 Corridor	State Road 37	Employment-based, with		
		supporting commercial and		
		residential components		
Acuff Road/Kinser Pike	Acuff Road, Kinser Pike, and State	Employment-based;		
	Road 37	Corporate offices, light		
		manufacturing, and small		
		scale retail		
	North of Fullerton Pike, east of State	Employment-based; Medical		
State Road 37/Tapp	Road 37, south of Tapp Road, and	and corporate office with light		
Road	east of the Woolery Farm PUD	manufacturing, retail, and		
		assisted living		
	North of 3 rd Street, east of State Road			
North College Mall	45/46 Bypass, south of 10 th Street/			
District	State Road 45, and west of Bell Trace	Urban Residential		
District	Retirement Community/ Park Ridge			
	Neighborhood			
	North of Moores Pike, east of Smith			
Huntington Farms/	Road, West of State Road 446, and			
Moores Pike	bounded on the north by the Gentry	Urban Residential		
Wilder Go T into	Honours PUD, Gentry Estates, and			
	Hearthstone residential development			
	South of Rogers Road, west of			
East Jackson Creek	Snoddy Road, east of Canada Farm	Urban Residential		
Luot duokson orcek	PUD and Sherwood Oaks Christian	Orban Residential		
	Church			
Winston-Thomas	West of Old State Road 37 and north	Employment, institutional,		
VIIIOLOII IIIOIIIAS	of Gordon Pike	and commercial		
	South of Moores Pike, west of Sare	Urban Residential		
Ramsey Farm	Road, and east and north of			
	Sycamore Knolls neighborhood			



Table 2-3				
Prime Growth Areas in CBU Service Area				
Area Location		Land Use Designation		
	West of Walker Street, south and			
Adams Street/	west of Rose Hill Cemetary, west of	Community Activity Contor		
Patterson Drive	Landmark PUD, and south to	Community Activity Center		
	Bloomfield Road			
	East of State Road 37, south of State			
West 17 th Street	Road 45/46 Bypass, West of Arlington	Urban Residential		
West 17 Street	Road, and north of Crestmont/			
	Bloomington Housing Authority			
	East of State Road 37, north of			
Twin Lakes Park North	Bloomfield Road, west of Shady	Urban Residential		
I WIII LANCS I AIN NOILII	Acres and Cory Lane Estates, and			
	south of 3 rd Street.			
	Extends from Country Club Drive to	Urban Greenway; with		
McDoel Switchyard	Adams Street along the railroad line	adjacent retail, housing, and		
		recreation		

1. Interstate 69 Corridor

On January 10, 2003, Governor O'Bannon and State Transportation Commissioner Nicol announced, near the completion of this Capital Improvement Plan, that the Interstate 69 Corridor would be routed through Bloomington. They estimated the time to completion being anywhere from eight to fourteen years. This Capital Improvement Plan does not take into consideration the effect of the Corridor on the geographical distribution of the population or future development in the CBU service area because of the unknowns associated with its construction. Any future Capital Improvement Plans should take this into consideration.